

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 5. (Cancelled)

6. (Currently Amended) A system comprising:

a housing;

a mainboard disposed within the housing to which memory and a first processor are connected, said mainboard providing a first network interface operatively coupled to the first processor having a first network port and a first network address;

a first peripheral device disposed within the housing;

a second network interface operatively coupled to the mainboard, providing a second network port and a second network address, the second network interface linked in communication with the first peripheral device; and

a communications link between the first and second network interfaces substantially disposed within the housing, the communications link using packetized messages based on a network transmission protocol to provide communication between the first processor and the first peripheral device, wherein the first and second network interfaces are both coupled to insert data received from the processor and the first peripheral device, respectively, into the packetized messages prior to transmitting the data onto the communications link and to extract the data from the packetized messages received from the communications link prior to providing the data to the processor and the first peripheral device, respectively.

7. (Original) The system of claim 6, wherein the communications link and the first and second network interfaces comprise an Ethernet subnet.

8. (Original) The system of claim 6, wherein the communication link comprises a network signal bus built into the mainboard.

9. (Original) The system of claim 6, wherein the communications link comprises a token ring.

10. (Original) The system of claim 6, wherein the second network interface is built into the first peripheral device;

11. (Original) The system of claim 6, wherein the second network interface is built into the mainboard.

12. (Original) The system of claim 6, wherein the peripheral device comprises one of a video subsystem, a memory subsystem, a disk controller and a modem.

13. (Original) The system of claim 6, wherein the mainboard further includes a second processor connected to a third network interface having a third network address and network port connected to the communications link.

14. (Currently Amended) A method for enabling communication between a peripheral device disposed within a computing machine having a processor and an application running on the processor, comprising:

- providing a network interface for each of the processor and the peripheral device;
- providing a communication link between the network interfaces of the processor and the peripheral device;
- creating a network software socket for each of the processor and the peripheral device;
- establishing a connection between the processor and the peripheral device;
- ~~generating messages with the application;~~
- separating data received at the network software socket for the processor into packetized messages including network transmission protocol information within the packetized messages;

transferring the packetized messages ~~between~~ from the processor ~~[[and]]~~ to the peripheral device ~~[[using]]~~ within the packetized messages over the communication link based on a network transmission protocol; and extracting the data from the packetized messages received over the communication link at the peripheral device.

15. (Previously Presented) The method of claim 14, wherein the network transmission protocol comprises the TCP/IP protocol.

16. (Previously Presented) The method of claim 14, further comprising applying security measures to determine if an application may connect to a particular peripheral device.

17. (Previously Presented) The method of claim 14, wherein the network transmission protocol comprises the UDP protocol.

18. (Previously Presented) The method of claim 14, wherein the communications link and the network interfaces comprise an internal Ethernet network.

19. (Previously Presented) The method of claim 14, wherein the communications link and the network interfaces comprise an internal token ring network.

20. (Previously Presented) The system of claim 6, further comprising:
a storage device on which software is stored, the software comprising machine instructions that are executable by the first processor that includes a socket application interface (API) that binds the address of the first peripheral device to the second network port and a network interface abstraction layer that provides an abstracted interface that enables an application to communicate with the first peripheral device using a networking protocol.

21. (Currently Amended) An apparatus, comprising:
a housing;
a first processor disposed within the housing;
a first network interface coupled to the first processor, the first network interface having a first network address;
a peripheral device disposed within the housing;
a second network interface coupled to the peripheral device and having a second network address; and
a network communication link disposed within the housing and coupled to communicate packetized messages based on a network transmission protocol between the first network interface and the second network interface to provide communication between the first processor and the peripheral device within the housing, wherein the first and second network interfaces are both coupled to insert data received from the processor and the peripheral device, respectively, into the packetized messages prior to transmitting the data onto the network communication link and to extract the data from the packetized messages received from the network communication link prior to providing the data to the processor and the peripheral device, respectively.

22. (Previously Presented) The apparatus of claim 21, wherein a software application executable by the first processor communicates with the peripheral device via a connection over the network communication link associating the first network address with the second network address.

23. (Previously Presented) The apparatus of claim 22, wherein the first network interface includes a first port address in addition to the first network address to create a first software socket for communicating with the processor and wherein the second network interface includes a second port address in addition to the second network address to create a second software socket for communicating with the peripheral device.

24. (Previously Presented) The apparatus of claim 21, wherein the network communications link comprise an Ethernet subnet.

25. (Previously Presented) The apparatus of claim 21, wherein the second network interface comprises a build-in network interface included within the peripheral device.

26. (Previously Presented) The apparatus of claim 21, wherein the peripheral device comprises a video card.

27. (Previously Presented) The apparatus of claim 21, wherein the peripheral device comprises a modem card.

28. (Previously Presented) The apparatus of claim 21, wherein the peripheral device comprises an external network interface to couple to an external network external to the housing.

29. (Previously Presented) The apparatus of claim 28, wherein the external network interface includes a network address translation ("NAT") device to translate network addresses between the external network and the network communication link.

30. (Previously Presented) The apparatus of claim 21, further comprising:
a second processor disposed within the housing; and
a third network interface coupled to the second processor and to the network communications link, the third network interface having a third network address to communicate with the peripheral device via the network communication link.

31. (Previously Presented) The apparatus of claim 21, further comprising a motherboard disposed within the housing, the motherboard including the first processor and the peripheral device mounted thereon.